

**6BH6****SHARP-CUTOFF PENTODE**

7-PIN MINIATURE TYPE

**6BH6****GENERAL DATA****Electrical:**

Heater, for Unipotential Cathode:

Voltage. . . . . 6.3 . . . . . ac or dc volts

Current. . . . . 0.15 . . . . . amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>0</sup></i>	
Grid No.1 to plate . . . . .	0.0035 max.	0.0035 max.	$\mu$ f
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater . . . . .	5.4	5.4	$\mu$ f
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater . . . . .	4.4	4.4	$\mu$ f

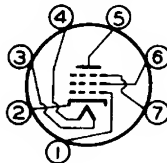
**Characteristics, Class A<sub>1</sub> Amplifier:**

Plate Voltage. . . . .	100	250	volts
Grid No.3 (Suppressor) . . . .	<i>Connected to cathode at socket</i>		
Grid-No.2 Voltage. . . . .	100	150	volts
Grid-No.1 Voltage. . . . .	-1	-1	volt
Plate Resistance (Approx.) . . .	0.7	1.4	megohm
Transconductance . . . . .	3400	4600	$\mu$ mhos
Plate Current. . . . .	3.6	7.4	ma
Grid-No.2 Current. . . . .	1.4	2.9	ma
Grid-No.1 Voltage (Approx.) for plate current of 10 $\mu$ amp . . .	-5	-7.7	volts

**Mechanical:**

Mounting Position. . . . .	Any
Maximum Overall Length . . . . .	2-1/8"
Maximum Seated Length. . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) . . .	1-1/2" $\pm$ 3-3/32"
Maximum Diameter . . . . .	3/4"
Dimensional Outline. . . . .	<i>See General Section</i>
Bulb . . . . .	T-5-1/2
Base . . . . .	Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW . . . . .	7CM

Pin 1 - Grid No.1  
Pin 2 - Cathode  
Pin 3 - Heater  
Pin 4 - Heater  
Pin 5 - Plate



Pin 6 - Grid No.2  
Pin 7 - Grid No.3,  
Internal  
Shield

<sup>0</sup> with external shield JETEC No.316 connected to cathode.

← Indicates a change.

SEPT. 1, 1955

**TUBE DIVISION****DATA**

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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## SHARP-CUTOFF PENTODE

### AMPLIFIER - Class A<sub>1</sub>

#### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. . . . .	300 max. volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE. . . . .	300 max. volts
→ GRID-No.2 VOLTAGE. . . . .	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section
GRID-No.1 (CONTROL-GRID) VOLTAGE:	
Negative bias value. . . . .	50 max. volts
Positive bias value. . . . .	0 max. volts
PLATE DISSIPATION. . . . .	3 max. watts
→ GRID-No.2 INPUT:	
For grid-No.2 voltages up to 150 volts . .	0.5 max. watt
For grid-No.2 voltages between 150 and 300 volts. . . . .	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section
PEAK HEATER-CATHODE VOLTAGE:	
Heater negative with respect to cathode. .	90 max. volts
Heater positive with respect to cathode. .	90 max. volts

→ Indicates a change.

SEPT. 1, 1955

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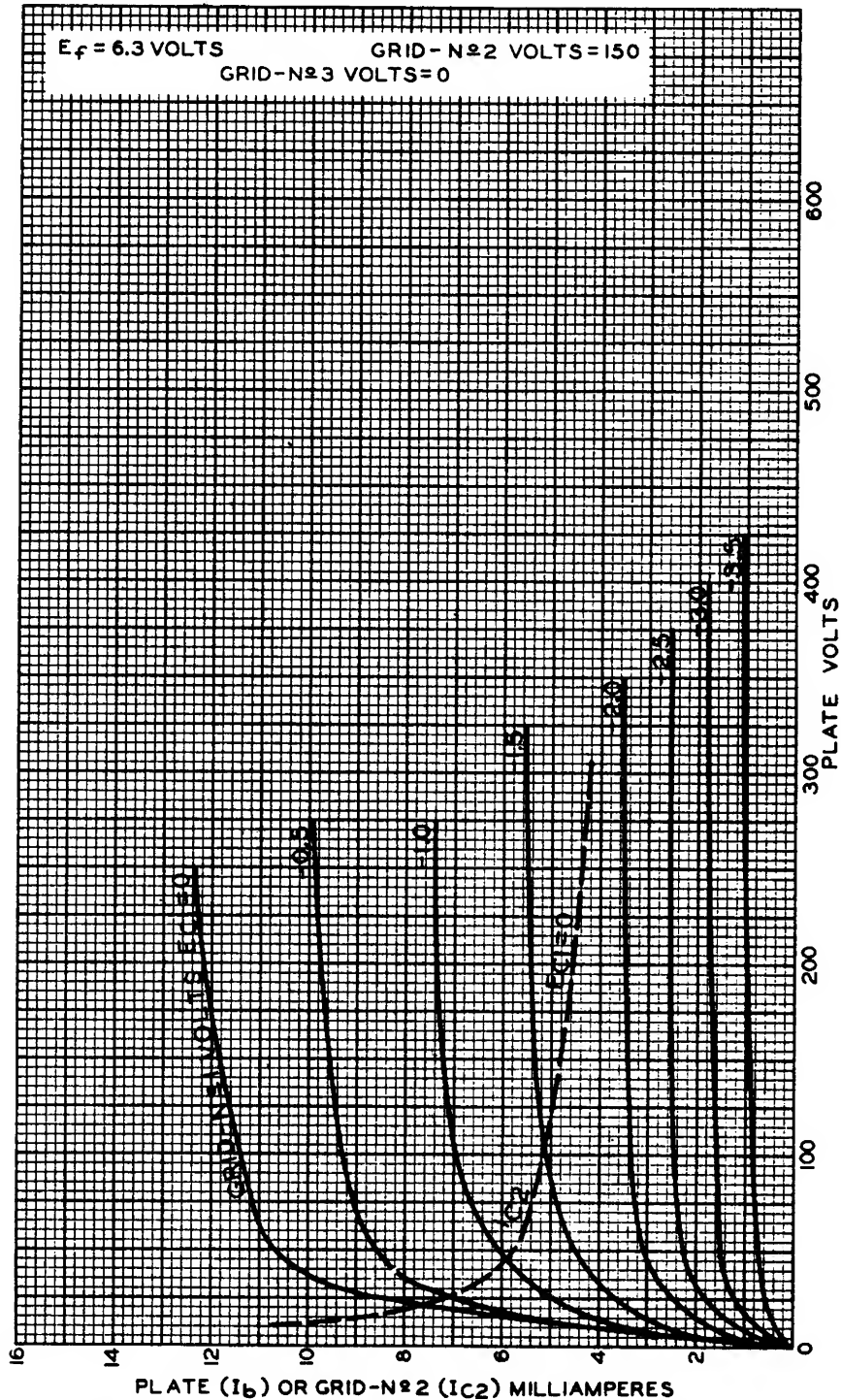
DATA



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# AVERAGE PLATE CHARACTERISTICS



AUG. 23, 1947

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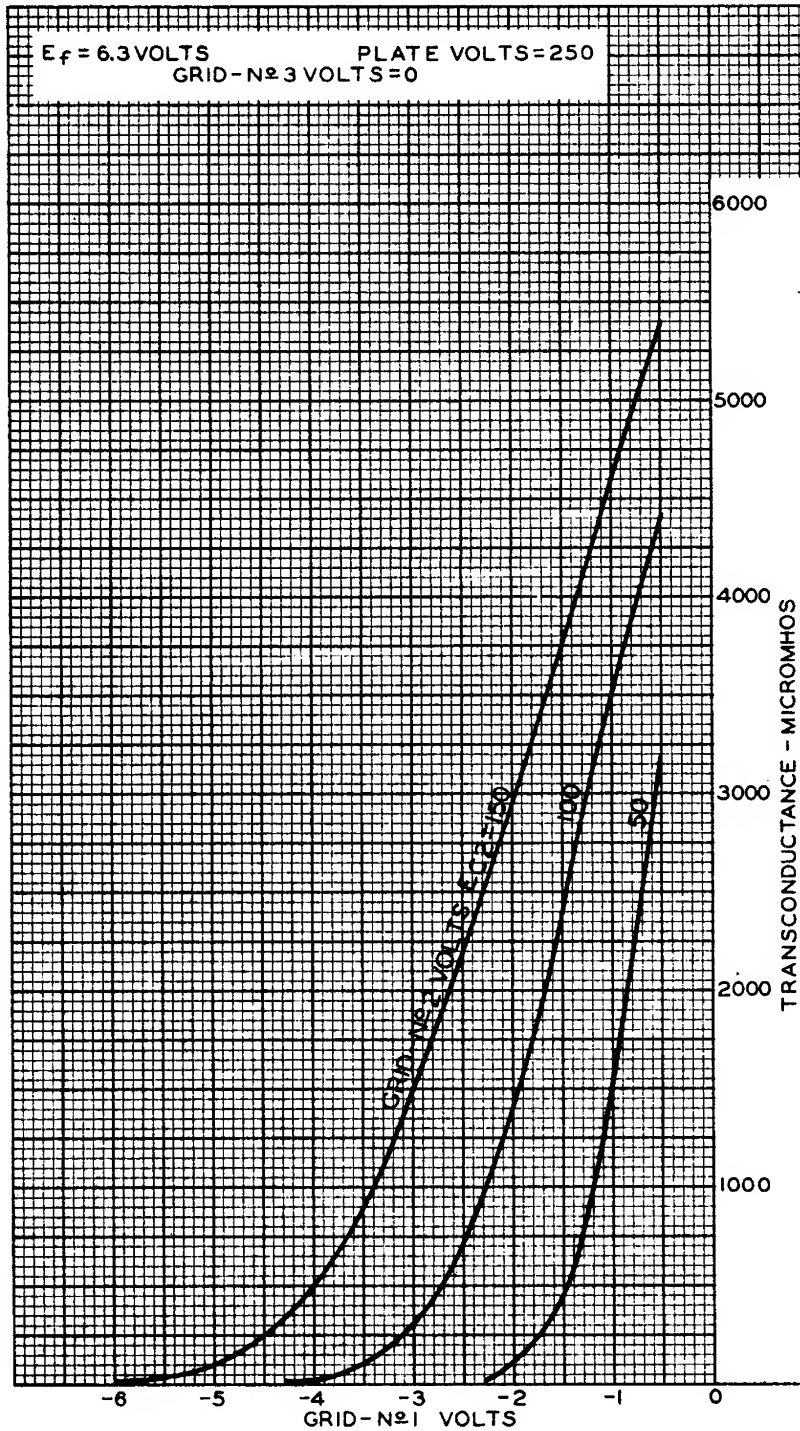
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### AVERAGE CHARACTERISTICS



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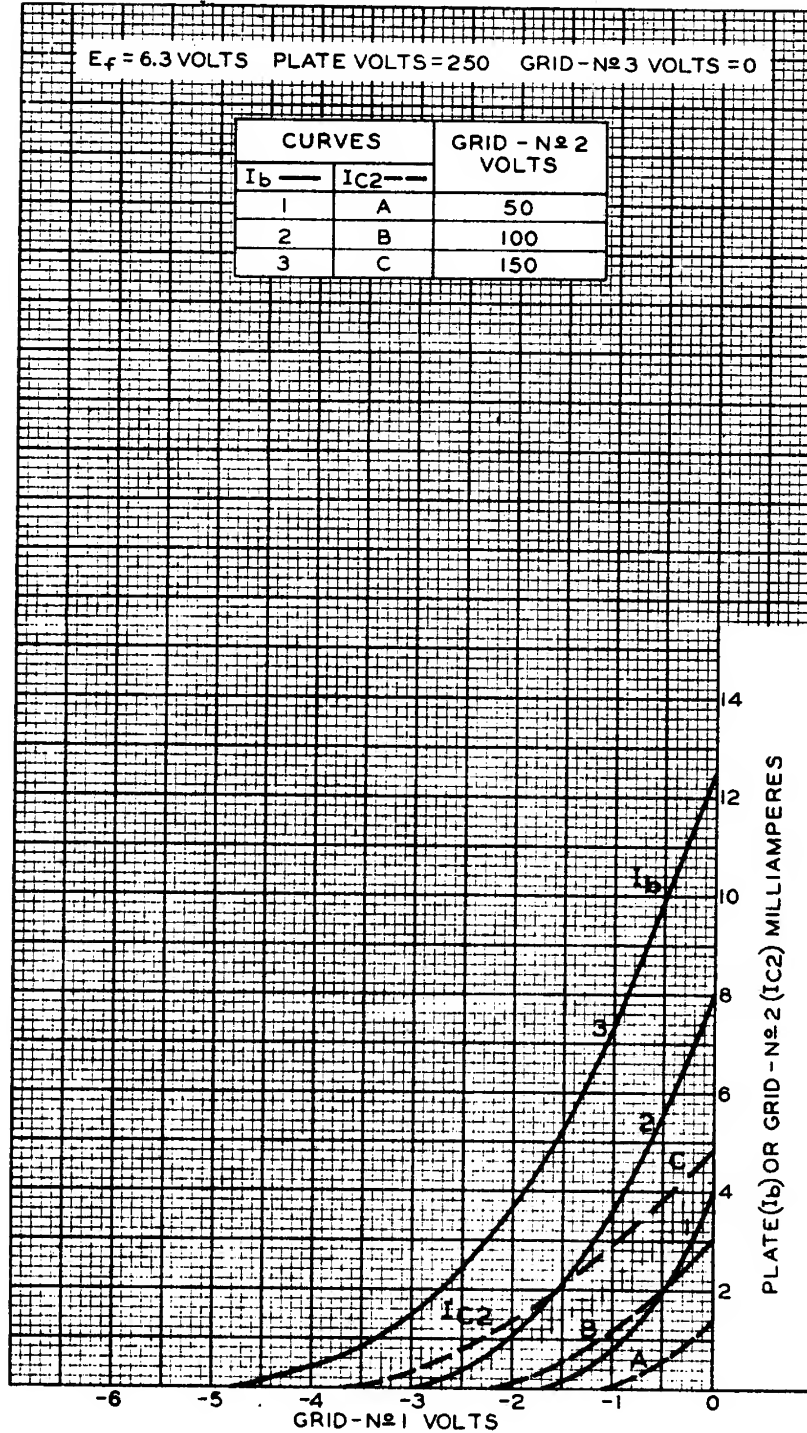
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### AVERAGE CHARACTERISTICS

$E_f = 6.3$  VOLTS PLATE VOLTS = 250 GRID - N° 3 VOLTS = 0

CURVES		GRID - N° 2 VOLTS
$I_b$ —	$I_{c2}$ - -	
1	A	50
2	B	100
3	C	150



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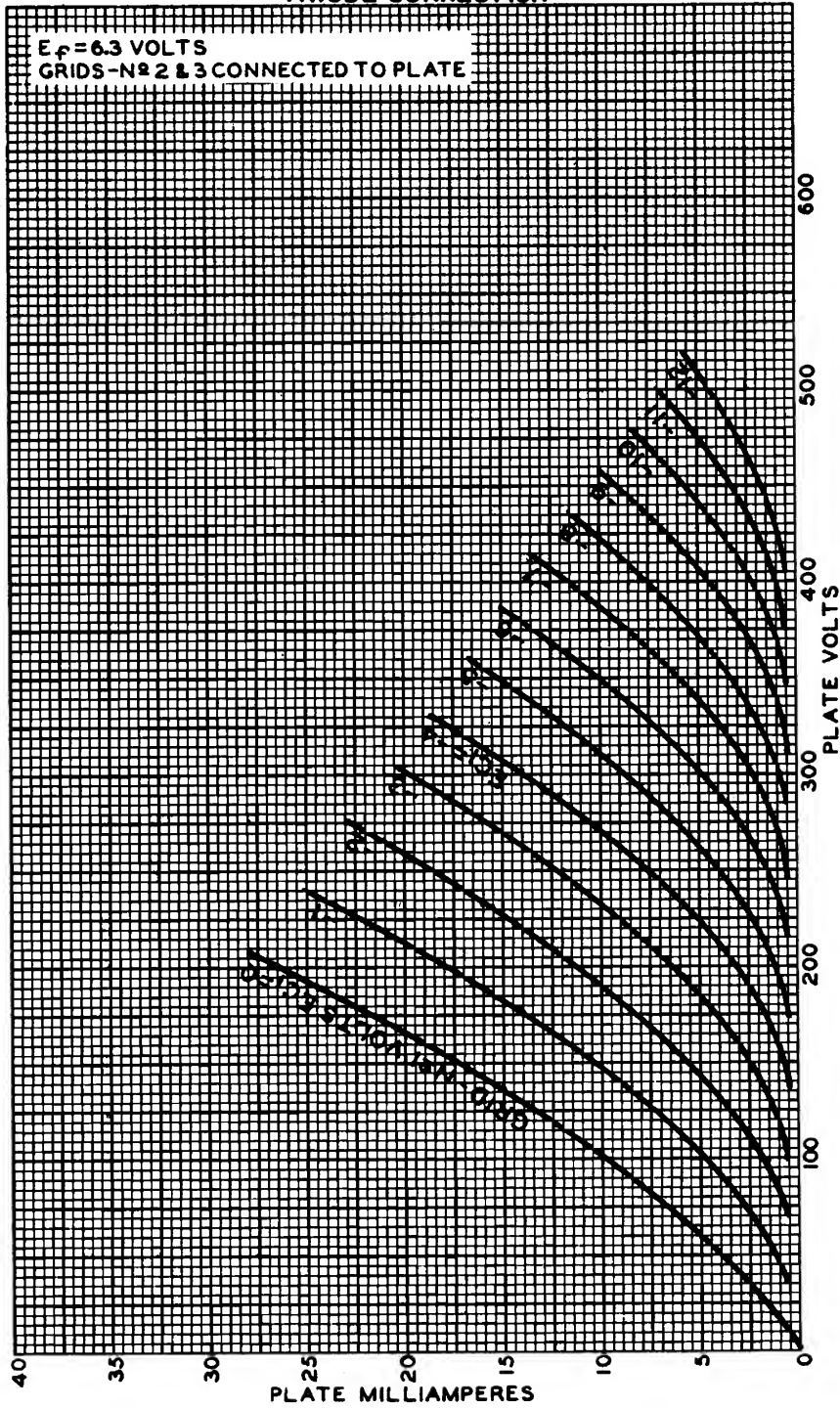
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# AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION



DEC. 10, 1947

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